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ABSTRACT

The report describes a study designed to ascertain the effectiveness of 12 board game simulations developed and used in a fifth grade Canadian history program. Questions examined include: 1) Does the use of board game simulations increase group participation and cultural, environmental, and historical awareness? 2) Does use of the games promote students' involvement, interest, interaction, motivation, and content acquisition? 3) Are some games more interesting than others? 4) Do the games and/or student interest have an impact on test scores? and 5) What characteristics of the games are more or less interesting? Twelve games were played relating to the Canadian fur trade, western settlement, Northwest Mounted Police, Canadian Pacific Railroad, and the Gold Rush. Seventy two students took part in the study. After game playing sessions, each student completed the 11-statement Gorman Interest Scale as well as several content questions pertinent to the game played. One week later students completed 18 general Canadian history questions. Results showed a positive and direct correlation between the games best liked and the amount of information retained. The socialization process became more positive as game playing sessions progressed. Conclusions showed that students were more interested in games allowing for many individual players decisions and those demanding more involvement and cooperation. All games allowed for development of social interaction, leadership, and organizational skills. (CK)

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REPORT NO. 80:7

"TO DETERMINE THE EFFECTIVENESS OF BOARD GAME SIMULATIONS IN THE GRADE FIVE SOCIAL STUDIES PROGRAM"

Vicki A. Green

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PROJECT DIRECTOR: (if different from author)

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FINAL REPORT

"TO DETERMINE THE EFFECTIVENESS OF
BOARD GAME SIMULATIONS IN THE GRADE FIVE
SOCIAL STUDIES PROGRAM"

DISCRETIONARY GRANT
181

Submitted to: E.R.I.B.C.

Submitted by:

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Title of the Project To Determine the Effectiveness of Board Game Simulations in the Grade Five Social Studies Program.

General Areas of Investigation and Specific Questions to be Examined

1) Does the use of board game simulations in the grade five Socials program increase:

a) group participation?

b) awareness of cultural contact and resultant conflicts?

c) awareness of borrowing from and adapting to environmental factors?

d) awareness of the lives experienced by those in the growth of Canada as a nation?

2) Does the use of board game simulations in the grade five Socials program promote:

a) involvement, interest?

b) peer interaction?

c) motivation?

d) information?

3) Are some games more interesting than others?

4) What are the characteristics or criteria of the games found to be less interesting?

5) Do the games and the interest involved have an impact on test scores?

6) Are the games effective in a Socials program to reinforce basic concepts and historical personalities?

Background for the Project

Many people have found the study of Canadian History "dry". Many of the children presently in the system often have parents who feel this way.

Background continued.

I have found history to be exciting, and I like games. In this regard I developed twelve games to involve students in a Canadian History experience. Viewing the game playing sessions and having outsiders into my classroom to witness the interactions, it appeared that the motivational criteria was being satisfied. Could it be measured?

The major units studied in the grade five Social Studies program are:

UNIT	GAMES DEVELOPED
The Fur Trade	Beaver Pelts Pathfollowers HBC and NWC Competition
Settlement of the West	Homestead
The Northwest Mounted Police	The Great March The NWMP and The Whiskey Trader The Northwest Rebellion
The Building of the C.P.R.	C.P.R. Survey Routes Speculation C.P.R. 1885
Gold Rush	Barkerville or Bust Barkerville

The games were first constructed on cardboard, later replaced by 2'x3' sheets of plywood. The games were designed to closely simulate actual economic and personal happenings during the various historical periods studied. The information contained in the games was taken from factual references, primary and secondary sources such as accounts and diaries. The games were used to supplement the regular classroom assignments and projects.

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Background continued.

The games were doing more than just motivating students. In their own way they were teaching and reinforcing factual and personal information about the historical events depicted. This was most apparent when an argument between two students as to who was the first Prime Minister of Canada erupted in the back corner of my classroom.

Procedures and General Plans

Seventy-two students took part in the testing. The games were available to students after they had completed the regular classroom work. One period a week was set aside for game playing during a particular unit of study. A two week session was set aside in April for all students to play the twelve games. At the completion of the game each student completed the "Gorman Interest Scale" and four questions petinent to the game played. A week after the game playing a twenty mark test on general content was completed by each student. These questions were specific and factual. No references could be made to the boards or to other students.

Results

The results were informative. As the designer, I found that there was a positive and direct correlation between the games best liked and the amount of information retained.

In the test comprising general questions the scores were:

Mean 14.3 Median 15.0 Mode 16.0

....4

Results continued.

GAME	GORMAN SCALE	SHORT TEST MEAN
Beaver Pelts	8.5	3.5
Pathfollowers	7.3	2.9
HBC and NWC Competition	8.6	3.4
Homestead	8.1	2.7
NWMP and The Whiskey Traders	8.8	3.5
Northwest Rebellion	7.8	3.4
The Great March	7.3	2.8
Speculation	7.8	3.2
CPR Surveys	7.0	2.8
CPR 1885	7.1	2.6
Barkerville or Bust	7.9	3.2
Barkerville	8.1	3.8

The socialization process of the grade five students tested was much more positive as the game playing sessions progressed.

Conclusions

Specific differences were identified by the testing. The higher interest games such as Beaver Pelts and HBC and NWC Competition, Homestead and NWMP and The Whiskey Trader allowed for many individual player decisions. The Great March, Speculation and CPR Surveys tended to be repetitive, quiet games based on the selection of programmed cards. Different children developed a preference for certain games. The games less involving on a board format have been changed into role playing and character games. This has proved successful as more children are

Conclusions continued.

are involved at one time.

All games allowed for social interaction, leadership roles to be developed, organizational skills to be apparent and solutions for such problems as "playing fair" and "whose turn" were found. Some games demanded more involvement and co-operation than others. Those that did, were rated higher on the interest scale.

After the testing, I felt more freedom to allow more time for specific games as the cognitive performance of the students' was being realized through the format and process of the game playing. I was satisfied that all initial questions I had about the games were answered. It is with great satisfaction that Beaver Pelts has been published by Canadian Social Sciences Services, Box 7095 Postal Station M, Edmonton, Alberta and is available to many more children than those attending Len Wood Elementary School in Armstrong. In the near future, HBC and NWC Competition will also be available.

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APPENDIX

Gorman Interest Scale. "The numbers in the parentheses are not shown to the students but are used to score the inventory. Each value represents a point on a scale from 11 to 1. The values of the items that a student checks are averaged, and that average becomes his/her score. Although ordinarily such inventories are two or three times longer, this one can be used to obtain a relatively systematic evaluation of student interest in a subject." (p.144)

Check the statements with which you agree.

___ This is a fascinating subject covering very interesting topics. (10)

___ This is a very dull subject, I wouldn't recommend it to anyone. (2)

___ This subject is quite stimulating at times; but at other times only mildly interesting. (7)

___ I find this subject fairly interesting. (6)

___ Of all subjects I have studied, this is the most interesting. (11)

___ This is the least interesting subject I have ever studied. (1)

___ I have little or no interest in this subject. (3)

___ This subject is interesting most of the time. (8)

___ I find this subject rather typical; not terribly interesting but not dull either. (5)

___ I find this subject quite interesting, in fact very interesting. (9)

___ Only now and then is this subject interesting, usually it is quite boring. (4)

NAME OF GAME PLAYED _____

YOUR DIVISION NUMBER _____

PUT A CHECK MARK BESIDE ANY STATEMENT WITH WHICH YOU AGREE

1. This is a fascinating game covering an interesting topic.____
2. This is a dull game. No one should play it. ____
3. This game is quite interesting sometimes but other times it is not interesting. ____
4. I find this game fairly interesting. ____
5. Of all the games I've played this is the most interesting. ____
6. This is the least interesting game I've ever played. ____
7. I have little or no interest in this game. ____
8. This game is interesting most of the time. ____
9. I find this game rather typical; not terribly interesting but not dull either. ____
10. I find this game quite interesting, in fact at times very interesting. ____
11. Only now and again this game is interesting, usually it is quite boring. ____

This year you have studied the social and economic development of Canada. A number of games were played during class. This is a test for me to see if the games helped you in learning about Canadian history.

Please answer the following questions.

Beaver Pelts

1. What is the meaning of barter? _____

2. List two problems the Indians had while trapping for beaver pelts.

_____ _____

3. Give an example of how the Indians benefitted from a trade good.

_____

Pathfollowers

1. List two problems the explorers had.

_____ _____

2. Tell two ways the Indians helped the explorers.

_____ _____

HBC and NWC Competition

1. What was the main form of transportation during the fur trade?

_____

2. List two trading forts. _____ _____

3. Define competition. _____

Homestead

1. How old did a person have to be to homestead?

(a) 42 (b) 18 (c) 21 (d) any age over 21

2. How much money did a homestead cost?

(a) $5.00 (b) $100.00 (c) $10.00 (d) $50.00

3. Give two examples of how homesteads were destroyed.

_____ _____

THE GREAT MARCH

1. Where did the march start?

   (a) Fort Garry (b) Fort Edmonton (c) Fort Dufferin

2. Where did the march end?

   (a) Fort MacLeod (b) Fort Calgary (c) Fort Kamloops

3. Men had to go to Fort Edmonton because they were

   (a) fired (b) dead (c) sick

4. A disease of the intestines caused from bad water is

   (a) dysentry (b) scurvy (c) measles

WHISKEY TRADERS

1. Where did the NWMP put the whiskey traders when captured?

   (a) in jail (b) on the reseve (c) to drunk and disorderly

2. Where did the Indians go when caught by the NWMP?

   _____

3. Where did the Indians go when caught by the whiskey traders?

   _____

4. Underline two NWMP forts.

   (a) Fort Garry (b) Fort Whoop Up (c) Fort Stand Off (d)Fort Pitt

SPECULATION

1. Why did people buy land before the railway route was chosen?

   _____

2. How much did land cost?

   (a) $15.00 (b) $200.00 (c) $20.00 (d) $100.00

3. How much did land sell for?

   (a) $200.00 - $400.00 (b) $100.00 - $200.00 (c) $50.00 - $ 100

BUILDING THE CPR

1. Where did the prairie section join the mountain section of the railway?
   (a) Dean Pass (b) Crow Pass (c) Eagle Pass (d) Rogers Pass
2. What year was the railway completed?
   (a) 1873 (b) 1885 (c) 1880 (d) 1975
3. Underline two major cities the railway went through.
   (a) Regina (b) Victoria (c) Edmonton (d) Winnipeg

CPR SURVEY ROUTES

1. Underline the two forts from which the survey men started.
   (a) Fort Dufferin (b) Fort Saskatoon (c) Fort Edmonton
   (d) Fort Vancouver (e) Fort Saskatchewan (f) Fort Garry
2. Name three problems the surveyers suffered.

_____ _____

_____

BARKERVILLE OR BUST

1. Name two towns you passed through on your way to Barkerville.
   (a) Victoria (b) Edmonton (c) Kamloops (d) Yale
2. Name the route that goes through the Fraser Canyon.
   (a) Harrison route (b) Cariboo Wagon Road (c) Highway 401
3. What is another name for striking it rich?
   (a) Klondike (b) El Dorado (c) Barkerville

NORTHWEST REBELLION

1. Who was hung in Regina for his part in the rebellion? _____
2. What two chiefs were put in jail for their part in the rebellion?

_____ _____

3. Who was the general in charge?
   (a) Strange (b) Otter (c) Middleton

BARKERVILLE

1. List some supplies needed for the goldfields.

_____ _____

_____

2. Give the names of two buildings in Barkerville.

_____ _____

3. Where was the value of gold decided?

(a) Claim Office (b) Assay Office (c) General Store

GENERAL QUESTIONS

1. Who was the prime minister of Canada that wanted the railway built?

(a) Alexander MacKenzie (b) John A. MacDonald (c) Pierre Trudeau

2. Advertisements were sent around the world because

a) many people did not want to come to Canada
b) few people knew about Canada
c) the government liked to spend money on advertisements

3. What group of people suffered because of the development of Canada?

a) Russians (b) Indians (c) French Canadians (d) Ukranians

4. Give two examples of changes in transportation from the Fur Trade and the Gold Rush to today.

_____ _____

5. Name two cities that were built because of the railroad or the gold rush.

_____ _____

6. Who built the prairie section of the CPR

(a) Onderdonk (b) Van Horne (c) Father LaCombe

7. Name something that Europeans borrowed or used from the Indians.

_____

8. What were two things introduced by the Europeans that harmed the Indians?
(a) liquor (b) wars (c) sickness (d) money

9. How many provinces does Canada have?
(a) 6 (b) 7 (c) 10 (d) 13

10. What is the capital city of Britsh Columbia?

_____

11. Name a territory of Canada.

_____

12. Name a major river in British Columbia.

_____

13. What river did Simon Fraser name after his friend, David Thompson?

_____

14. What does mosaic mean?
(a) everybody as one (b) small parts making a whole (c) I don't know

15. What does ethnocentrism mean?
a) thinking everybody is the same the world over.
b) thinking our way of doing something is the best or right way.
c) thinking other people have a better way of doing something.

16. Who is ethnocentric?
a) only a few people
b) only people in other countries
c) everybody

17. The part of Socials I like the best was
(a) Fur Trade (b) Settlement (c) NWMP (d) CPR (e) Gold Rush

18. The part of Socials I liked the least was
(a) Fur Trade (b) Settlement (c) NWMP (d) CPR (e) Gold Rush

Total 20